Nortel Secure Router 4134

Commissioning

NN47263-302 (323249-A)

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New in this release

The following section details what's new in Nortel Secure Router 4134 — Commissioning (NN47263-302) for Release 10.0.

Features

See the following sections for information about feature changes:

- "User names and passwords" (page 5)
- "System administrator account" (page 5)
- "Alarms and system status" (page 5)

User names and passwords

The system administrator (the only user with level 1 access) can identify users (that is, login names) who can access the Secure Router 4134. The administrator can also assign each new user a level of access privileges (levels 2–4). The default access level is 4. For more information about adding and removing users from the system, see "Adding users" (page 34) and "Removing users" (page 35).

System administrator account

Nortel recommends that you change the default administrator user name and password for security reasons. The default administrator user name is "admin". The default password is "setup". For more information on customizing the system administrator account, see "Changing the admin user password" (page 32) and "Changing the administrator account name" (page 33).

Alarms and system status

When commissioning the Secure Router 4134, you can check for alarms and view the status of all interface modules. See "Checking the system status" (page 40) and "Checking the system for alarms" (page 39) for procedures that describe how to view this type of system information

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Introduction

This document provides information about the recommended method to commission the Secure Router 4134. For a complete list of Command Line Interface (CLI) commands that you use to monitor and configure the Secure Router 4134, see Nortel Secure Router 4134 — Command Line Reference (NN47263-507).

Prerequisites

- Hardware installation is complete.
- You must have a console cable to connect to the console port on the rear panel of the router.
- You must have an Ethernet cable to connect to the management port on the rear panel of the router.
- Be familiar with using the CLI and interpreting partial configuration procedures. See Nortel Secure Router 4134 — Using the Command Line Interface (NN47263-506).

Navigation

- "Secure Router 4134 commissioning" (page 9)
- "Commissioning configuration procedures" (page 13)

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Secure Router 4134 commissioning

You commission the Secure Router 4134 to prepare the unit for software feature configuration. Commissioning includes tasks such as establishing communication with the system, defining boot parameters, configuring usernames and passwords, and establishing remote access.

Prerequisites

- Ensure the Secure Router 4134 is securely installed in an equipment rack.

Secure Router 4134 commissioning procedures

This task flow shows you the sequence of procedures you perform to commission the Secure Router 4134. To link to any procedure, go to "Secure Router 4134 commissioning navigation" (page 11).

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Figure 1
Secure Router 4134 commissioning procedures

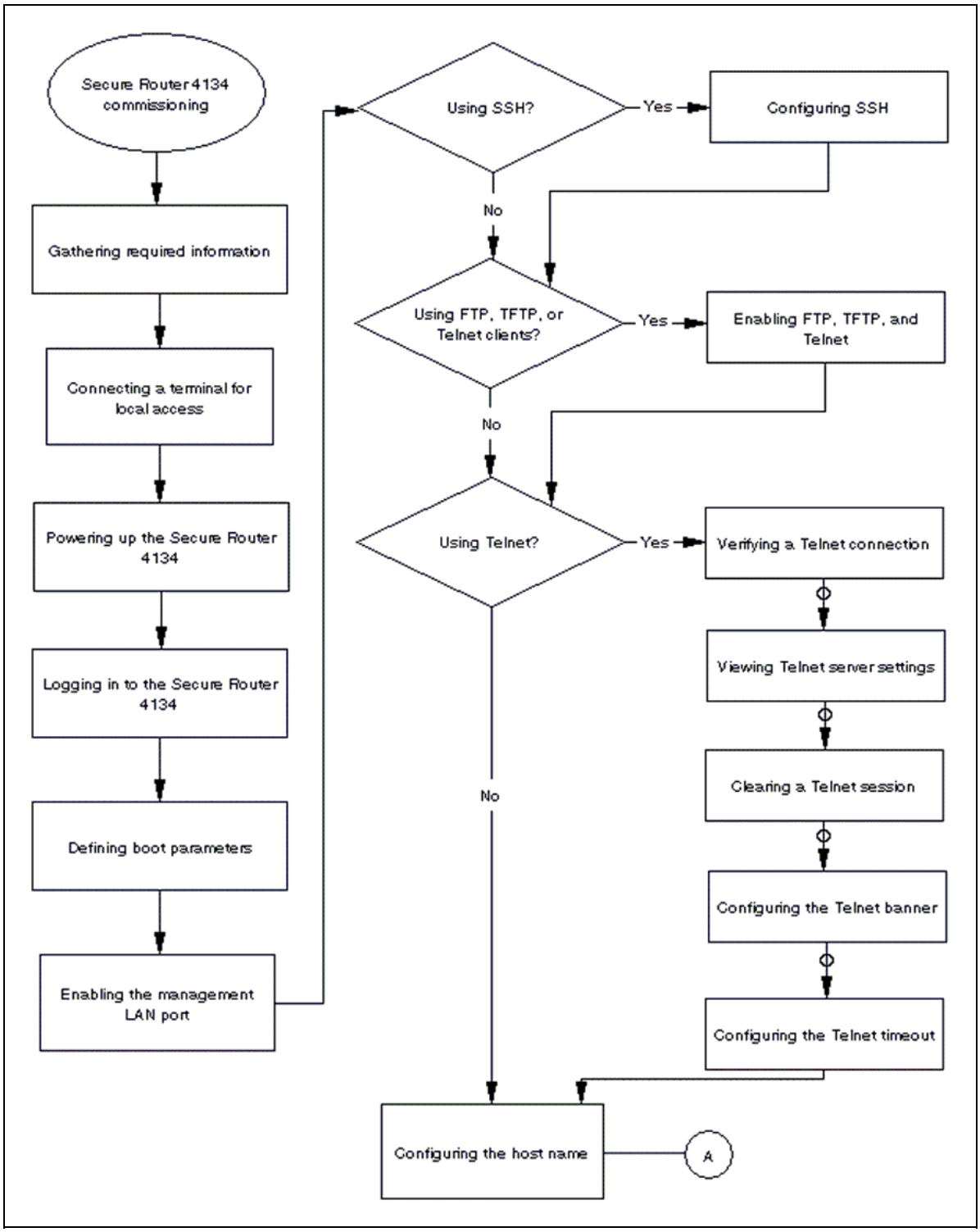

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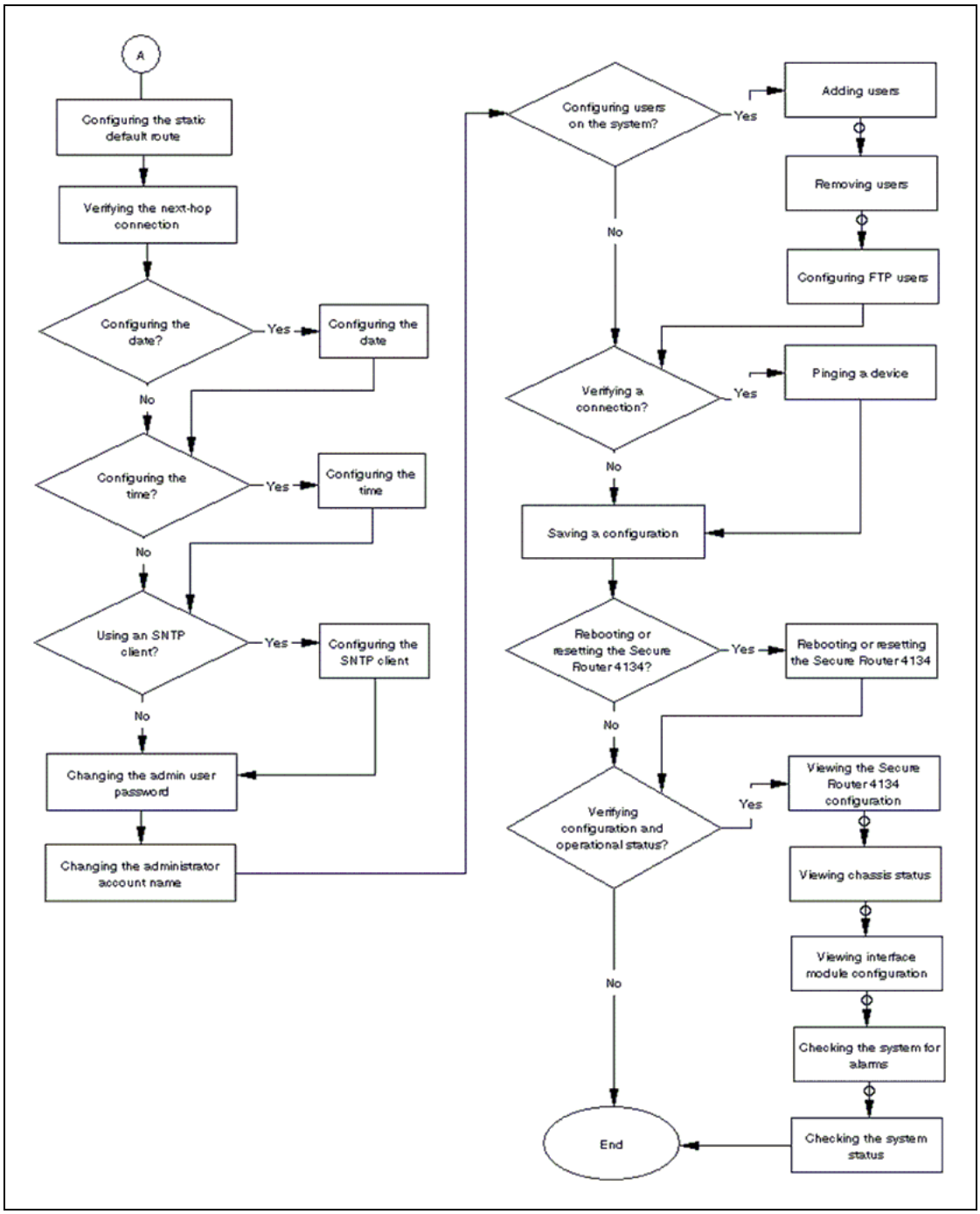
Figure 2
Secure Router 4134 commissioning procedures (continued)



Secure Router 4134 commissioning navigation

- "Gathering required information" (page 13)
- "Connecting a terminal for local access" (page 14)

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- "Powering up the Secure Router 4134" (page 16)
- "Logging in to the Secure Router 4134" (page 19)
- "Defining boot parameters" (page 20)
- "Enabling the management LAN port" (page 22)
- "Configuring SSH" (page 24)
- "Enabling FTP, TFTP, and Telnet" (page 25)
- "Verifying the Telnet connection" (page 25)
- "Viewing Telnet server settings" (page 26)
- "Clearing a Telnet session" (page 26)
- "Configuring the Telnet banner" (page 27)
- "Configuring the Telnet timeout" (page 28)
- "Configuring the host name" (page 29)
- "Configuring the static default route" (page 29)
- "Verifying the next-hop connection" (page 30)
- "Configuring the date" (page 30)
- "Configuring the time" (page 31)
- "Configuring the SNTP client" (page 32)
- "Changing the admin user password" (page 32)
- "Changing the administrator account name" (page 33)
- "Adding users" (page 34)
- "Removing users" (page 35)
- "Configuring FTP users" (page 36)
- "Pinging a device" (page 36)
- "Saving a configuration" (page 37)
- "Rebooting or resetting the Secure Router 4134" (page 37)
- "Viewing the Secure Router 4134 configuration" (page 38)
- "Viewing chassis status" (page 39)
- "Viewing interface module configuration" (page 39)
- "Checking the system for alarms" (page 39)
- "Checking the system status" (page 40)

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Commissioning configuration procedures

This section includes the recommended method to commission the Secure Router 4134, while ensuring that you limit unauthorized access to the router.

Commissioning is the first step following hardware installation. The commissioning task includes the initial procedures required to bring the router online, and to configure appropriate access for remote users.

Gathering required information

Before you begin, gather all the information you require to complete the commissioning steps.

Procedure steps

Step	Action
1	Record all the required information for commissioning your Secure Router 4134 in the following table.

—End—

Procedure job aid

Table 1
Gathering required information

Required information	Sample entries	Record information here
New password for admin user	kevx	
Host name	fremont	
Management IP address and mask	10.11.12.13 255.255.255.0	

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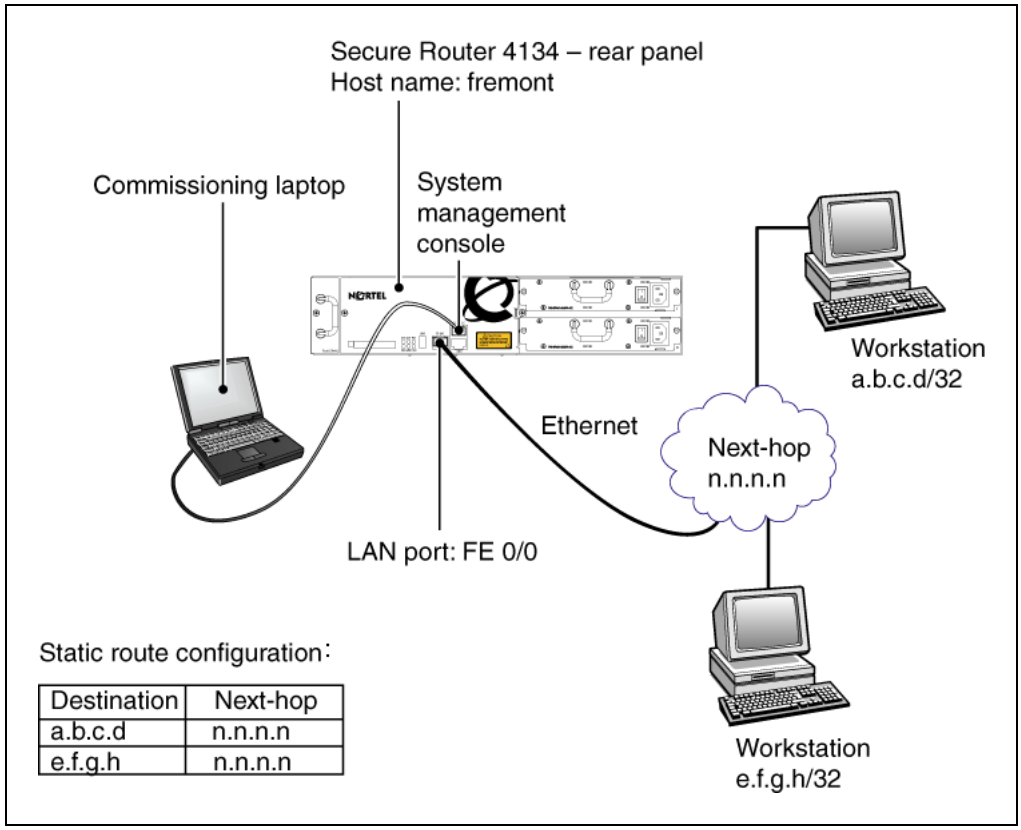
Required information	Sample entries	Record information here
Next hop IP address for static route to hosts and servers	11.12.13.14/24	
IP address of hosts and servers that access the Secure Router 4134	a.b.c.d/32	

The following figure is an example of a commissioning scenario showing the basic configuration requirements including host name, management interface, and terminals.

Figure 3
Commissioning scenario



Connecting a terminal for local access

Connect a local terminal to the console port on the rear panel of the Secure Router 4134. This local connection provides communication with the system during commissioning.

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ATTENTION

When powering up for the first time, Nortel recommends that you use a direct console connection to the Secure Router 4134. After you have completed the initial configuration, you can use a remote connection for router management.

Prerequisites

- You have a PC running HyperTerminal or similar terminal emulation program with the following communication protocol settings:
  - 9600 bps
  - 8 data bits
  - 1 stop bit
  - No flow control
  - No parity
- Ensure you have the supplied console cable (shipped with the chassis).
- Ensure you have the supplied female DB-9 to RJ-45 adapter if you require it for connection to your terminal or PC.
- Ensure you have the Secure Router 4134 securely installed in the equipment rack.

Procedure steps

Step	Action
1	Insert the male RJ-45 connector in the console port on the rear panel of the Secure Router 4134.
2	Connect the female DB-9 to RJ-45 adapter to the opposite end of the console cable, if necessary.
3	Insert the RJ-45 or female DB-9 connector (dependent on your equipment) in a terminal or PC.

—End—

Procedure job aid

The following figure shows how to connect a terminal for local access.

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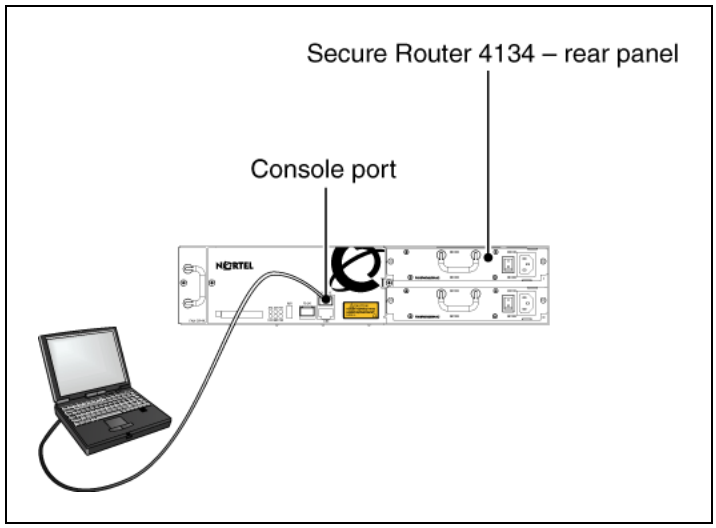
Figure 4
Connect a local terminal to the Secure Router 4134



Powering up the Secure Router 4134

Power up the Secure Router 4134 to initiate the power-on diagnostics test. The Secure Router 4134 indicates the resulting pass or fail with status LEDs, and by logging results in the event log.

Average time for the Secure Router to boot up: 5 minutes.

Prerequisites

- The Secure Router 4134 is securely mounted and grounded. For information about installing the Secure Router 4134 chassis, see Nortel Secure Router 4134 Installation — Chassis (NN47263-300). For information about installing the power supplies, interface modules, and other hardware components, see Nortel Secure Router 4134 Installation — Hardware Components (NN47263-301).
- Power cables for AC power supplies are connected.
- DC power for DC power supplies is connected.
- A local terminal is connected to the Secure Router 4134 console port (the console port is located on the rear panel of the router).
- Ensure you have powered up the terminal or PC.

DANGER
Risk of electric shock
Ensure the Secure Router 4134 is properly grounded. For information about grounding the Secure Router 4134, see Nortel Secure Router 4134 Installation — Chassis (NN47263-300)

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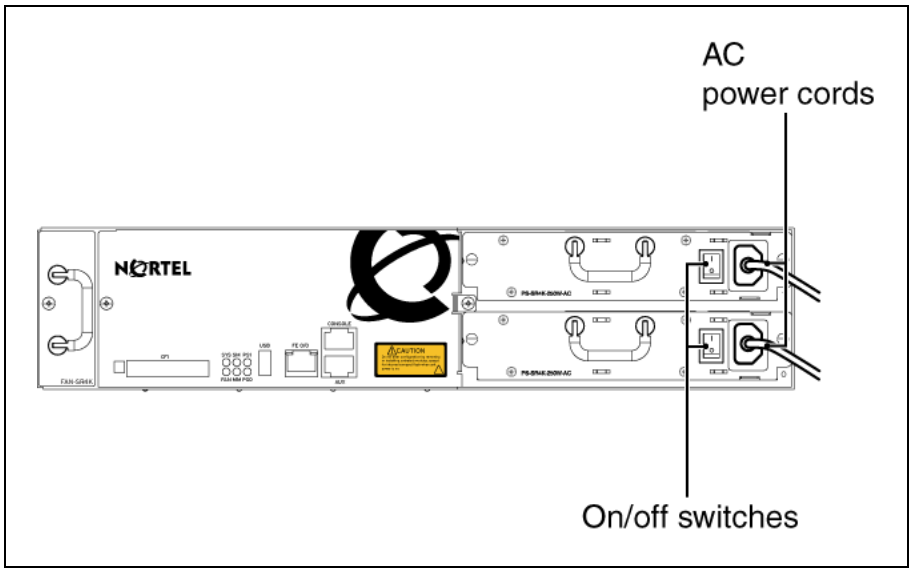
ATTENTION

When powering up for the first time, Nortel recommends that you use a direct console connection to the Secure Router 4134. After you have completed the initial configuration, you can use a remote connection for router management.

Procedure steps (AC power)

Step	Action
1	Turn on one power switch at a time (if you installed two AC power supplies). Power switches are on the rear panel of the Secure Router 4134. The fans start immediately, and the LEDs cycle.



2	Verify that diagnostic testing is underway by observing the startup messages on your local terminal.
3	Once the router completes the self-diagnostics tests, verify that the System LED and the power LEDs that correspond to the power supplies installed on your router (PS0 and PS1) are green.
4	Verify that the fan LED on the rear panel of the Secure Router 4134 is green, and air is flowing through the unit.

—End—

Procedure steps (DC power)

Step	Action
1	Turn on the DC power source. The fans start immediately, and the LEDs cycle.

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2 Verify that diagnostic testing is underway by observing the startup messages on your local terminal.

3 Once the router completes the self-diagnostics tests, verify that the System LED and the power LEDs that correspond to the power supplies installed on your router (PS0 and PS1) are green.

4 Verify that the fan LED on the rear panel of the Secure Router 4134 is green, and air is flowing through the unit.

—End—

For troubleshooting information, see Nortel Secure Router 4134 — Troubleshooting (NN47263-700).

When the Secure Router 4134 begins powering up, the boot sequence displays messages on the terminal or PC that you connected to the console port. A prompt displays at the beginning of the boot sequence indicating that you can stop the auto-boot sequence by pressing any key. The Secure Router 4134 waits for 5 seconds for input from you before beginning the boot sequence. If you press a key and stop the auto-boot sequence, the Secure Router 4134 displays the bootrom command menu. The following figure shows the prompt to stop the auto-boot sequence and enter the bootrom command area.

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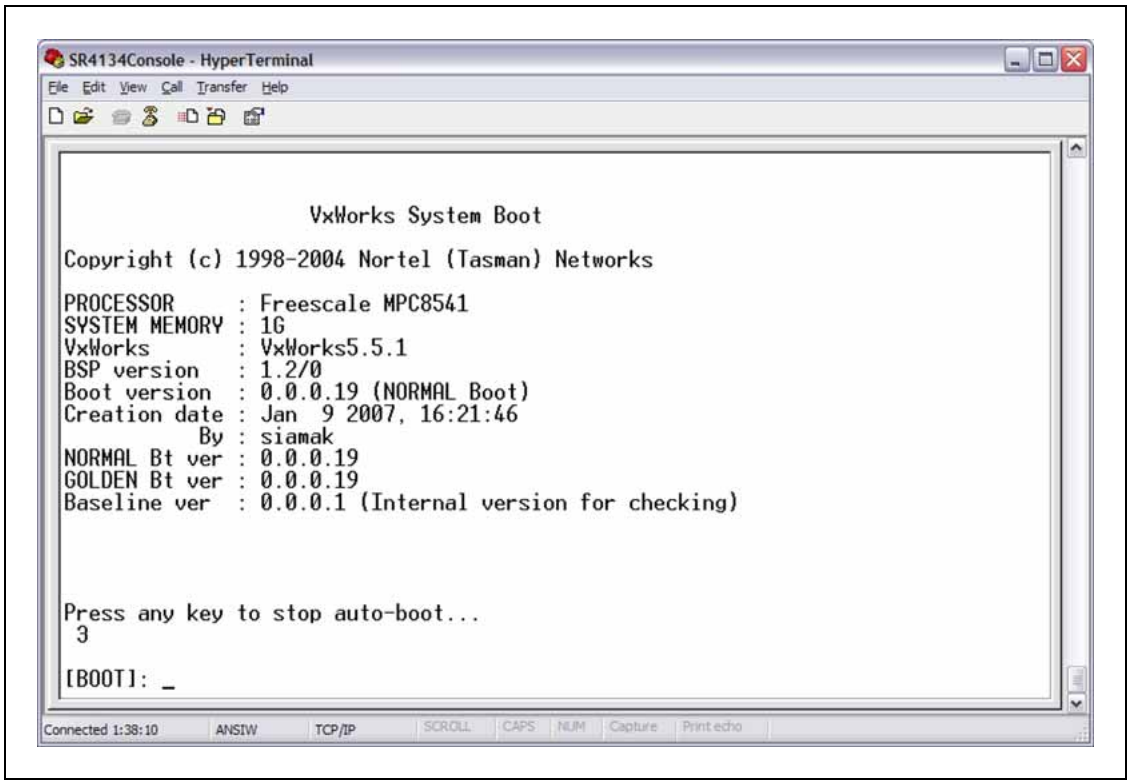
Figure 5
Accessing the bootrom command menu


SR4134Console - HyperTerminal
File Edit View Call Transfer Help
VxWorks System Boot
Copyright (c) 1998-2004 Nortel (Tasman) Networks
PROCESSOR : Freescale MPC8541
SYSTEM MEMORY : 1G
VxWorks : VxWorks5.5.1
BSP version : 1.2/0
Boot version : 0.0.0.19 (NORMAL Boot)
Creation date : Jan 9 2007, 16:21:46
By : siamak
NORMAL Bt ver : 0.0.0.19
GOLDEN Bt ver : 0.0.0.19
Baseline ver : 0.0.0.1 (Internal version for checking)
Press any key to stop auto-boot...
3
[BOOT]: _
Connected 1:38:10
ANSIW
TCP/IP

If you accidentally enter the bootrom command menu, you can exit that command menu and restart the normal boot sequence by pressing @ on your keyboard.

For detailed information on using the bootrom command menu, see Nortel Secure Router 4134 — Troubleshooting (NN47263-700).

Logging in to the Secure Router 4134

The first time you log on to the Secure Router 4134 CLI, you perform initial configuration such as the following:

- Configure the IP address for the management port.
- Configure the next-hop (gateway IP address).
- Enable remote access.

Use the procedure in this section to log on to the Secure Router 4134 for the first time.

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Prerequisites

- You have securely mounted the Secure Router 4134 in an equipment rack.
- You have connected a local terminal to the console port on the rear panel of the Secure Router 4134.
- You have powered up the Secure Router 4134.
- The boot sequence is complete.

Procedure steps

Step	Action

1	To log on to the Secure Router 4134 CLI for the first time, enter the default user name and password:
	`login:  admin`
	`password:  setup`

—End—

Defining boot parameters

You can configure boot parameters for the Secure Router 4134. The Secure Router 4134 provides two bootrom images for redundancy:

- normal bootrom—the default boot image saved in the normal boot area, and used as your working bootrom image
- golden bootrom—the backup boot image saved in the golden boot area, and used if the normal bootrom image is corrupted

Procedure steps

Step	Action
1	To access configuration mode, enter: `configure terminal`
2	To define the boot parameters, enter: `boot_params`

—End—

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Example of defining boot parameters

Step	Action
1	Access configuration mode: **configure terminal**
2	Define boot parameters: **boot_params** The router returns the following: `WARNING : Configuration changes not yet saved!`
3	When prompted, enter the name of the device from which you prefer the router boots: `Boot dev [ftp,cf0,cf1,usb0]:  cf0`
4	Enter the boot file name (the router provides this information if you have previously configured it): `Boot file name:  SR4134.Z`
5	Enter the name of the server you use (the router provides this information if you have previously configured it): `Server name:  sunserver`
6	Enter the server IP address (the router provides this information if you have previously configured it): `Server IP address:  10.10.11.12`
7	Enter the router IP address (the router provides this information if you have previously configured it): `My IP address:  10.10.13.14`
8	Enter the subnet mask (the router provides this information if you have previously configured it): `My subnet mask:  255.255.255.0`
9	Enter the gateway IP address (the router provides this information if you have previously configured it): `Gateway IP address:  10.10.15.16`

10	Enter your user name and password:
	`User name:  kevx`
	`Password:  kevx`

11	Enter 0 to disable or 1 to enable the checksum feature: `Checksum enable [0:Disable,1:Enable]:  1`
12	Enter 0 to disable or 1 to enable the display of the image header contents: `Show header enable [0:Disable,1:Enable]:  1`

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13 Enter the number (0, 1, or 2) that corresponds to the type of bootrom image update that you prefer, or enter 3 if you prefer to not update the bootrom image:

```
Save bootrom image [0:AutoUpdate,1:NormalB-
Tupd,2:GoldenBTupd,3:NoUpd]:  0
```

If you select 0, 1, or 2, the router returns the following:

```
BOOT PARAMETERS HAVE BEEN SAVED.
```

14 Reboot the Secure Router 4134 to activate changes, or continue with your configuration:

```
DO YOU WANT TO REBOOT: (Y/N) ? y
```

—End—

Viewing boot parameters and software image information

Use the procedures in this section to view the boot parameters configuration and to display information for the normal and golden bootrom images.

Procedure steps

Step	Action
1	To view the boot parameters configuration, enter **`show boot_params`**
2	To view bootrom image information, enter: **`file show_boot`**

—End—

Enabling the management LAN port

Enable the management Local Area Network (LAN) port on the Secure Router 4134 for network management access. To enable the management port, you assign it an IP address.

ATTENTION

The Secure Router 4134 management Ethernet interface (FE 0/0) on the rear panel does not support jumbo frames. Therefore, the management port Maximum Transmission Unit (MTU) can be configured with a value in the range of 64 to 1500 bytes.

The following figure shows the location of the management port on the rear panel of the Secure Router 4134.

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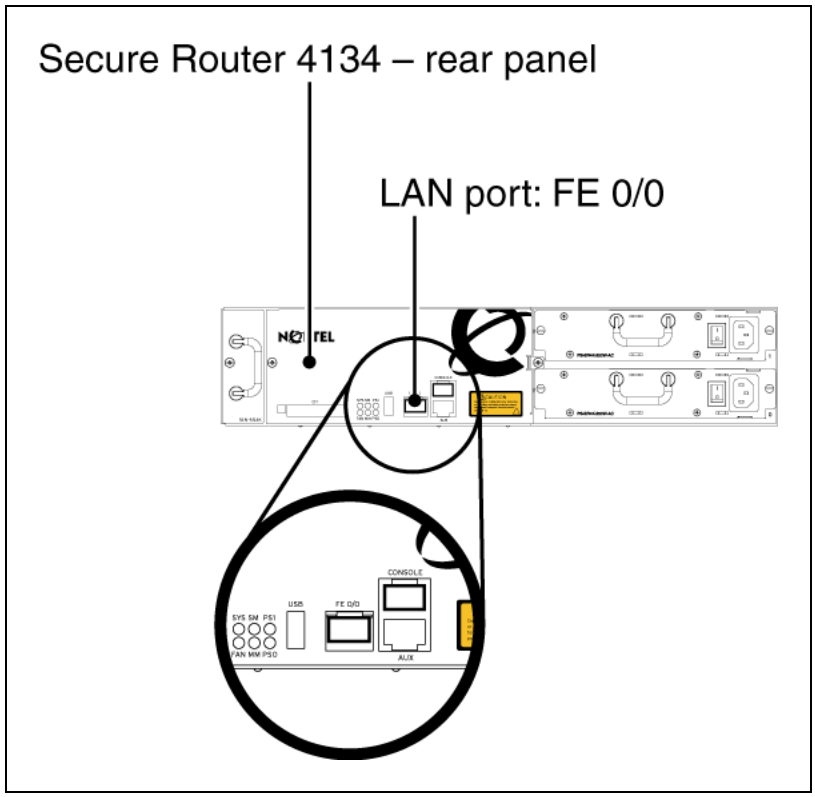
Figure 6
Management port on the rear panel of the Secure Router 4134



Prerequisites

- You must be connected to the Secure Router 4134 through the console port. See "Connecting a terminal for local access" (page 14) for information about connecting a terminal to the console port.
- You must log in as a user with sufficient permissions to configure the Secure Router 4134.
- You must have the IP address and netmask that you want to assign to the management port.

The following procedure uses Ethernet port 0/0 (on the rear of the Secure Router 4134) for the management port. You can also use port 0/1 or port 0/2 on the front panel of the Secure Router 4134 for management purposes. Ethernet port 0/0 is a 10/100 Base-T port. Ethernet ports 0/1 and 0/2 are 10/100/1000 Base-T ports.

Procedure steps

Step	Action
1	To access configuration mode, enter:

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```
configure terminal
```

2 To identify the management port for configuration, enter:
```
interface ethernet 0/0
```

3 To configure the management port IP address, enter:
```
ip address <ipaddr> <netmask>
```

—End—

Table 2
Variable definitions

Variable	Value
<ipaddr>	The IP address that you assign to the management port. For example, 10.11.12.13.
<netmask>	The network mask that you assign to the management port IP address. For example, 255.255.255.0.

Configuring SSH

You can enable an SSH connection for remote access. To generate a key and enable SSH, use the procedures in this section.

Procedure steps

Step	Action
1	To access configuration mode, enter: `configure terminal`
2	To access the SSH key generation subtree, enter: `ssh_keygen`
3	To generate the DSA key, enter: `generate dsa`
4	To generate the RSA key, enter: `generate rsa`
5	To exit the SSH key generation subtree, enter: `exit`

6	To enable the SSH connection, enter:
	`ssh_server`
	`enable`

7	To save the configuration, enter:

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```
save local
```

—End—

Enabling FTP, TFTP, and Telnet

The default configuration for the Secure Router 4134 includes FTP, TFTP, and Telnet servers disabled. You can enable any and all of these servers to allow this type of access to the Secure Router 4134.

Prerequisites

- You must assign an IP address to the Secure Router 4134.

Procedure steps

Step	Action
1	To access configuration mode, enter: `configure terminal`
2	To enable the FTP service, enter: `ftp_server`
3	To enable the TFTP service, enter: `tftp_server`
4	To enable the Telnet service, enter: `telnet_server`

—End—

Verifying the Telnet connection

Verify the Telnet connection to ensure that users can successfully access the Secure Router 4134 using remote access.

Prerequisites

- The IP address of the management interface on the Secure Router 4134 must be configured.
- You must have the IP address of the management interface on the router.
- You must have a terminal or workstation connected to the Ethernet LAN.

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Procedure steps

Step	Action
1	To start a Telnet session from your workstation, enter: **telnet <ipaddr>**
2	To log in, enter: login: **admin** password: **setup**

—End—

Viewing Telnet server settings

View the Telnet server settings for information about the status of the Telnet server (enabled or disabled) and the Telnet session timeout value.

Procedure steps

Step	Action
1	To view information about the Telnet server settings, enter: **show telnet**

—End—

Clearing a Telnet session

You can disconnect a specific Telnet session, if necessary, or you can disconnect all Telnet sessions simultaneously.

Procedure steps

Step	Action
1	To view the list of users currently connected using a Telnet session to find the Telnet session sequence numbers, enter: **show users** The following figure shows an example of the Telnet session sequence numbers for users remotely connected to the router.

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```
SR4134# show users

ACTIVE USERS:

SNO     NAME        LOGIN TIME                  IPADDR
+-----------------------------------------------------+
 1  : danm      :  Thu Apr 5 6:25:07 2007   : 10.11.12.13
 2  : admin     :  Thu Apr 5 6:50:28 2007   : 10.11.12.14
+-----------------------------------------------------+
```

2 To clear a specific Telnet session, enter:
clear telnet_session <value>

—End—

Table 3
Variable definitions

Variable	Value
<value>	The Telnet session sequence number. Enter a value from 1 to 16.

To quickly disconnect all Telnet sessions, use the command:
clear telnet_sessions

Configuring the Telnet banner

You can customize the banner that appears when users access the router using Telnet services. When configuring the Telnet banner, use **\n** to begin a new line.

Procedure steps

Step	Action
1	To access configuration mode, enter: **configure terminal**
2	To configure the Telnet banner, enter: **telnet_banner banner <string> [banner1] [banner2]**

—End—

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Table 4
Variable definitions

Variable	Value
[banner1]	An optional parameter that you use to extend the banner text. If you require the banner text be more than 255 characters in length, use **banner1 <string>** to continue the banner text.
[banner2]	An optional parameter that you use to extend the banner text.
<string>	The banner text that you want to appear in Telnet sessions. The banner text can be up to 255 characters in length. Use **\n** to begin a new line within the banner.

Configuring the Telnet timeout

You can configure the timeout value for Telnet sessions. A Telnet session disconnects if it remains inactive for the configured session duration.

Procedure steps

Step	Action
1	To access configuration mode, enter: **configure terminal**
2	To configure the Telnet timeout value, enter: **telnet_timeout <value>**

—End—

Table 5
Variable definitions

Variable	Value
<value>	Enter the time in seconds (from 0 to 3600) after which inactive Telnet sessions automatically disconnect. The default value is 900 seconds. If you enter a value of 0 seconds, inactive Telnet sessions do not automatically disconnect.

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Configuring the host name

Configure a host name for the Secure Router 4134 to uniquely identify it. Once assigned, the host name becomes the CLI prompt name.

ATTENTION

Changing the host name later (that is, post commissioning), and committing this change, drops all Telnet and SSH connections. All active console sessions also end.

Procedure steps

Step	Action
1	To access configuration mode, enter: **`configure terminal`**
2	To configure the host name for the Secure Router 4134, enter: **`hostname <WORD>`**

—End—

Table 6
Variable definitions

Variable	Value
<WORD>	The name you want to assign to the Secure Router 4134.

Configuring the static default route

Configure a static route to specify a preferred route to a destination. You can identify the gateway, or next-hop, for a static route by specifying one of the following:

- IP address of a directly connected interface
- name of a local interface such as ethernet0/0

Procedure steps

Step	Action
1	To access configuration mode, enter: **`configure terminal`**
2	To configure the gateway route, enter: **`ip route <netaddr/mask> <gateway>`**

—End—

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Table 7
Variable definitions

Variable	Value
<netaddr/mask>	The IP address and the subnet mask of the destination network. For example, 11.12.13.14/24. Entering the subnet mask is optional.
<gateway>	The IP address or interface name of the gateway. For example, 10.11.12.16.

Verifying the next-hop connection

Use the procedure in this section to verify that the connection from the management interface successfully connects to the next-hop device.

Prerequisites

- You must have the IP address of the next-hop device.

Procedure steps

Step	Action
1	To ping the next-hop device, enter: `ping <ipaddr>`

—End—

Configuring the date

To configure the date, you enter the month, day, and year.

Procedure steps

Step	Action
1	To access configuration mode, enter: `configure terminal`
2	To configure the date, enter: `date <month> <day> <year>`

—End—

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Table 8
Variable definitions

Variable	Value
<day>	The current day in relation to the month. Enter a value from 1 to 31.
<month>	The current month. Enter a value from 1 to 12.
<year>	The current year. Enter a value from 2000 to 2100.

Configuring the time

To set the current time for the Secure Router 4134, you specify the time in relation to Coordinated Universal Time (UTC):

- time zone offset — ahead (+) or behind (-) UTC
- number of hours ahead or behind UTC
- number of minutes ahead or behind UTC

Procedure steps

Step	Action
1	To access configuration mode, enter: **`configure terminal`**
2	To configure your local time, enter: **`utc <+|-> <hour offset> <minute offset>`**

—End—

Table 9
Variable definitions

Variable	Value
<+|->	The time zone offset. Enter + to indicate that your time zone is ahead of UTC. Enter - to indicate that your time zone is behind UTC. For example, if you are in New York, you enter **`utc -`**.

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Variable	Value
<hour offset>	The number of hours that your local time is offset from UTC. Enter a value from 0 to 23. For example, if you are in New York, you enter **utc - 4**.
<minute offset>	The number of minutes that your local time is offset from UTC. Enter a value from 0 to 59. For example, if you are in New York, you enter **utc - 4 0**.

Configuring the SNTP client

The Simple Network Time Protocol (SNTP) synchronizes the internal clocks of various network devices across large, diverse networks to universal standard time. Use the procedure in this section to enable the SNTP client on the Secure Router 4134.

Procedure steps

Step	Action
1	To access configuration mode, enter: **configure terminal**
2	To set the location of the SNTP server, enter: **sntp server {ipaddr|hostname}**
3	To set the timeout value for the response from the server, enter: **sntp timeout <value>**

—End—

Table 10
Variable definitions

Variable	Value
{ipaddr | hostname}	The IP address or host name of the broadcast server. The default value is any broadcast server.
<value>	The timeout value in seconds. The default timeout value is 1024 seconds.

Changing the admin user password

The system administrator login consists of two components: the account name and the password. The initial login name is always "admin". You can change this after logging in for the first time. The default administrative

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password is "setup". Nortel recommends you change the default password as soon as possible to ensure only authorized personnel can access the Secure Router 4134.

Procedure steps

Step	Action
1	To access password configuration mode, enter: **password** The Secure Router 4134 prompts you for the current user name.
2	Enter the default user name, which is the current user name: **admin** The Secure Router 4134 prompts you for the old password.
3	Enter the default password, which is the current password: **setup** The Secure Router 4134 prompts you for the new password.
4	Enter your new password. The Secure Router 4134 prompts you to verify the new password.
5	Re-enter your new password. A message appears that confirms that the password is changed.

—End—

Changing the administrator account name

Use the procedure in this section to change the administrator login name (Level 1 access) to a user-specified name. The default login name for the Secure Router 4134 is "admin". The administrator login name can be from 3 to 39 characters in length.

Procedure steps

Step	Action
1	To access configuration mode, enter: **configure terminal**
2	To change the login name, enter: **admin_name <WORD>** The Secure Router 4134 displays a message that confirms the login name is successfully changed.

—End—

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Adding users

You can identify users (that is, login names) who can access the Secure Router 4134, and assign each user an access privilege (levels 2–4). Only the system administrator (level 1 access) can add, modify, or remove this information from the system.

Procedure steps

Step	Action
1	To access configuration mode, enter: **`configure terminal`**
2	Enter the user name and access level: **`user <username> level <value>`** The Secure Router 4134 prompts you to enter a password for this user.
3	Enter a password (from 0 to 10 characters) for the new user. The Secure Router 4134 prompts you to re-enter the password.
4	Re-enter the password for the new user. The Secure Router 4134 confirms that the password is set and confirms the name of the new user is added.

—End—

Table 11
Variable definitions

Variable	Value
<username>	The user name you want to add to the Secure Router 4134. The user name can contain up to 39 characters.
<value>	The access level assigned to the user. Values are 2–4. The lower the access level value, the higher the access privileges. For example, a user with an access level of 2 has more privileges than a user with an access level 3 or 4.

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Procedure job aid

The CLI supports four levels of privilege for users. The following table defines each level.

Table 12
CLI user access levels

Privilege level	Privilege name	Definition
1 (highest)	PRIVILEGE_ADMIN	Admin level can access any command and configure any feature in the router, including user configuration and administration.
2	PRIVILEGE_CONFIGURE	Configure level can configure any feature. Cannot add or delete users.
3	PRIVILEGE_TEST	Test level can only run diagnostic tests. Cannot access configuration commands.
4 (lowest)	PRIVILEGE_NORMAL	Normal level can only enter **`show`** or **`display`** commands.

Removing users

The system administrator can remove configured user names from the Secure Router 4134.

ATTENTION
To reset a user password, you must delete and then recreate the user account.

Procedure steps

Step	Action
1	To access configuration mode, enter: **`configure terminal`**
2	To remove a user, enter: **`no user <username>`**

—End—

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Configuring FTP users

Procedure steps

Step	Action
1	To access configuration mode, enter: **configure terminal**
2	To configure an FTP user, enter a user name: **ftp_user <username>**
3	At the prompt, enter a password for the FTP user: Please enter new password: **<password>**
4	At the prompt, re-enter the password: Please re-enter password: **<password>** If you entered the password correctly, the Secure Router returns a message indicating a successful configuration: password is set

—End—

Pinging a device

Ping a device to verify the connection between the Secure Router 4134 and that network device. If the network device sends a ping reply, a message indicates that the specified IP address is alive and can communicate with the router. If the router does not receive a reply, the message indicates that the address is not responding.

Prerequisites

- You must physically connect the Secure Router 4134 to the network.
- You must physically connect the specific network device to the network.

Procedure steps

Step	Action
1	Ping the network device: **ping <ipaddr>**

—End—

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Saving a configuration

Issue the save command to save the running configuration to a file. You can save the configuration to the local file system, or to a file on the network.

Procedure steps

Step	Action
1	To save the configuration to the local file system, enter: **save local [file <filename>]**
2	To save the configuration to a network file, enter: **save network <ipaddr> <path>**

—End—

Table 13
Variable definitions

Variable	Value
[file <filename>]	The name of the file to which the configuration is saved. This is an optional parameter. The configuration is saved to the system default file (system.cfg) if you do not specify a filename.
<ipaddr>	The IP address of the device on which you store the network configuration file.
<path>	The full path of the remote configuration file.

Rebooting or resetting the Secure Router 4134

Reset and reboot the Secure Router 4134 properly to avoid file system corruption. Resetting the router returns it to a factory-default configuration. Rebooting the router shuts down and restarts the system. The procedure in this section shows you how to reset the configuration on the Secure Router 4134, reboot the router to restore the factory-default settings, and save the factory-default settings to the configuration file.

Procedure steps

Step	Action
1	To access configuration mode, enter: **configure terminal**
2	To reset the Secure Router 4134, enter: **system reset-to-factory {system|users}**
3	To reboot the Secure Router 4134, enter:

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```
reboot
```

4 When the Secure Router 4134 completes the reboot, save the factory-default settings to the system.cfg file by entering:
```
save local
```

—End—

Table 14
Variable definitions

Variable	Value
{system | users}	Enter **system** to remove all information stored in memory, which includes user information, event logs, crash logs, command logs, and boot parameters. Enter **users** to remove all users and information related to users.

Viewing the Secure Router 4134 configuration

View the Secure Router 4134 configuration to understand the current state of the system software.

For more information about using commands, see Nortel Secure Router 4134 — Using the Command Line Interface (NN47263-506). For a complete list of CLI commands, see Nortel Secure Router 4134 — Command Line Reference (NN47263-507).

Procedure steps

Step	Action
1	To view the current configuration, enter: **show configuration running** You can also enter **show running-config** to view the current configuration.
2	To view the configuration that is stored in Flash, enter: **show configuration stored** You can also enter **show startup-config** to view the stored configuration.

—End—

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Viewing chassis status

Use the procedure in this section to view summary information about the Secure Router 4134 chassis, including its operational status. After you install interface modules, you can use the **show chassis** command to verify that the Secure Router 4134 recognizes the modules.

Procedure steps

Step	Action
1	To view summary information about the Secure Router 4134, enter: **show chassis**

—End—

Viewing interface module configuration

Use the procedure in this section to quickly check the state and configuration of installed interface modules.

Procedure steps

Step	Action
1	To view the configuration of interface modules installed in your Secure Router 4134, enter: **show module configuration all**
2	To view the configuration of individual interface modules, enter: **show module configuration [t1|e1|ct3|serial|hssi|t3] <slot/port>**

—End—

Checking the system for alarms

The Secure Router 4134 reports alarms when it detects irregular conditions in incoming signals to the interface modules. Use the **show module alarms** command to quickly check for any irregularities.

Procedure steps

Step	Action
1	To view the current alarms for any T1 WAN link on the Secure Router 4134, enter: **show module alarms t1 <slot/port>**

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2 To view the current alarms for any E1 port on the Secure Router 4134, enter:
show module alarms e1 <slot/port>

3 To view the current alarms for any CT3 port on the Secure Router 4134, enter:
show module alarms ct3 <slot/port>

4 To view the current alarms for any serial port on the Secure Router 4134, enter:
show module alarms serial <slot/port>

5 To view the current alarms for any HSSI port on the Secure Router 4134, enter:
show module alarms hssi <slot/port>

6 To view the current alarms for any T3 port on the Secure Router 4134, enter:
show module alarms t3 <slot/port>

—End—

Checking the system status

You can view the operating status and current configuration of each WAN, Ethernet, or serial interface using the **show module configuration** command. Refer to Nortel Secure Router 4134 — Command Line Reference (NN47263-507) for a complete list of CLI commands for the Secure Router 4134.

Procedure steps

Step	Action
1	View the operating status of all installed interface modules: **show module configuration all**

—End—

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Nortel Secure Router 4134

Commissioning

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